INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Joseph E. Kernan
Governor

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Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.state.in.us/idem

Ms. Tita LaGrimas
Pollution Control Industries, Inc.
4343 Kennedy Avenue
East Chicago, Indiana 46312

February 4, 2004

Re: 089-18513-00345
First Permit Modification to
Minor Source Modification #089-15970-00345

Dear Ms. LaGrimas:

Pollution Control Industries, Inc. was issued a Minor Source Modification (MSM) on December 2, 2003 for the construction and operation of waste solvent treatment equipment. A letter requesting changes to this MSM was received on December 17, 2003. Pursuant to 326 IAC 2-7-12, a permit modification to this permit is hereby approved as described in the attached Technical Support Document.

This modification consisted of allowing the source to process waste with benzene content higher than 10% and waste received from the chemical plants, adjusting the VOC emission limits for waste treatment units, and removing the recordkeeping requirements for benzene content and waste sources.

All other conditions of the permit shall remain unchanged and in effect. Please find attached a copy of the revised permit.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Yu-Lien Chu, ERG, Morrisville, North Carolina 27560, or call (919) 468-7871 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,
Original signed by
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

ERG/YC

cc: File - Lake County
U.S. EPA, Region V
Lake County Health Department
Northwest Regional Office
Air Compliance Section Inspector - Rick Massoels/Ramesh Tejuja
Compliance Data Section
Administrative and Development - Sara Cloe
Technical Support and Modeling - Michele Boner
Title V Reviewer: ERG/PG

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PART 70 MINOR SOURCE MODIFICATION
OFFICE OF AIR QUALITY

Pollution Control Industries, Inc.
4343 Kennedy Avenue
East Chicago, Indiana 46312

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Minor Source Modification No.: 089-15970-00345	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: December 2, 2003

First Permit Modification No.: 089-18513-00345	Pages Affected: 4, 15 through 23
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: February 4, 2004

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SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary waste processing and handling plant.

Responsible Official:	Executive V.P. of Regulatory Affairs
Source Address:	4343 Kennedy Avenue, East Chicago, Indiana 46312
Mailing Address:	4343 Kennedy Avenue, East Chicago, Indiana 46312
General Source Phone Number:	219-397-3951
SIC Code:	4953
County Location:	Lake
Source Location Status:	Nonattainment for PM10, SO2, and Ozone Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD and Major Source under Emission Offset Rules Major Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

(a) One (1) SDS shredder, identified as SDS, constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, controlled by a carbon adsorption system, and exhausting to stack SDS 01.

(b) One (1) Anaerobic Thermal Desorption Unit (ATDU), identified as ATDU, constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, equipped with one (1) 10 MMBtu/hr natural gas fired heater (venting through stack SDS 02), one (1) carbon adsorption system (for VOC control, venting through stack SDS 03), and one (1) pug mill scrubber (for particulate control, venting through stack SDS 04).

(c) One (1) distillation unit, constructed in 2004, with a maximum throughput rate of 1.0 tons of liquid waste per hour, controlled by a carbon adsorption system, and exhausting to stack SDS 05.

(d) One (1) condensed liquid tank, identified as tank 01, constructed in 2004, with a maximum capacity of 20,000 gallons.

(e) Three (3) product tanks, identified as tank 02 through 04, constructed in 2004, each with a maximum capacity of 12,000 gallons.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 NSPS Reporting Requirement

Pursuant to the New Source Performance Standards (NSPS), Part 60.116b Subpart Kb, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

(a) Commencement of construction date (no later than 30 days after such date);

(b) Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);

(c) Actual start-up date (within 15 days after such date); and

(d) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

The application and enforcement of these standards have been delegated to the IDEM, OAQ. The requirements of 40 CFR Part 60 are also federally enforceable.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ,. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for the unit.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

(a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the

provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.9 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.11 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than

twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.12 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan under 40 CFR 60/63 , such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan to include such response steps taken.

The OMM Plan shall be submitted within the time frames specified by the applicable 40 CFR60/63 requirement.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be 10 days or more until the unit or device will be shut down, then the permittee shall promptly notify

the IDEM, OAQ and OES of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall be considered a deviation from the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within “normal” parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.13 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and the Northwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM, OAQ
Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section)
or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

Northwest Regional Office
Telephone No.: 1-888-209-8892, or
Telephone No. 219-881-6712
Facsimile No.: 219-881-6745

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)() be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.15 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.16 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management

Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(a) One (1) SDS shredder, identified as SDS, constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, controlled by a carbon adsorption system, and exhausting to stack SDS 01.

(b) One (1) Anaerobic Thermal Desorption Unit (ATDU), identified as ATDU, constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, equipped with one (1) 10 MMBtu/hr natural gas fired heater (venting through stack SDS 02), one (1) carbon adsorption system (for VOC control, venting through stack SDS 03), and one (1) pug mill scrubber (for particulate control, venting through stack SDS 04).

(c) One (1) distillation unit, constructed in 2004, with a maximum throughput rate of 1.0 tons of liquid waste per hour, controlled by a carbon adsorption system, and exhausting to stack SDS 05.

(d) One (1) condensed liquid tank, identified as tank 01, constructed in 2004, with a maximum capacity of 20,000 gallons.

(e) Three (3) product tanks, identified as tank 02 through 04, constructed in 2004, each with a maximum capacity of 12,000 gallons.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 General Provisions relating to NESHAP [326 IAC 20-23][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-23, apply to the facilities described in this section except when otherwise specified in 40 CFR Part 63, Subpart DD, Table 2.

D.1.2 NESHAP for Offsite Waste and Recovery Operations [326 IAC 20-23] [40 CFR 63, Subpart DD]

(a) Pursuant to 40 CFR 63.683(b)(1), the Permittee shall comply with one of the following requirements for the off-site material management units (the SDS shredder, the ATDU, and the tanks 01 through 04), except for those units exempted under 40 CFR 63.683(b)(2).

(1) The Permittee shall control air emissions from the off-site material management unit in accordance with the applicable standards specified in 40 CFR 63.685 through 63.689.

(2) The Permittee shall remove or destroy HAP in the off-site material before placing the material in the off-site material management unit by treating the material in accordance with the standards specified in 40 CFR 63.684.

(3) The Permittee shall determine, before placing off-site material in the off-site material management unit, that the average Volatile Organic Hazardous Air Pollutant (VOHAP) concentration of the off-site material is less than 500 parts per million by weight (ppmw) at the point-of-delivery. The Permittee must perform an initial determination of the average VOHAP concentration of the off-site material using the procedures specified in 40 CFR 63.694(b). This initial determination must

be performed either before the first time any portion of the off-site material stream is placed in the unit or by the compliance date, whichever date is later. Thereafter, the owner or operator must review and update, as necessary, this determination at least once every calendar year following the date of the initial determination for the off-site material stream.

(b) Pursuant to 40 CFR 63.683(c)(1), the Permittee shall comply with one of the following for process vents (the distillation unit), except for those units exempted under 40 CFR 63.683(c)(2).

(1) The Permittee shall control air emissions from the process vent in accordance with the standards specified in 40 CFR 63.690.

(2) The Permittee shall determine, before placing off-site material in the process equipment associated with the process vent, that the average VOHAP concentration of the off-site material is less than the ppmw at the point-of-delivery. The owner or operator must perform an initial determination of the average VOHAP concentration of the off-site material using the procedures specified in 40 CFR 63.694(b) before any portion of the off-site material stream is placed in the unit. Thereafter, the owner or operator must review and update, as necessary, this determination at least once every calendar year following the date of the initial determination for the off-site material stream.

(c) Pursuant to 40 CFR 63.683(d), the Permittee must control equipment leaks from each equipment component that is part of the affected source specified in 40 CFR 63.680(c)(3) by implementing leak detection and control measures in accordance with the standards specified in 40 CFR 63.691.

D.1.3 General Provisions relating to NESHAP [326 IAC 14-1][40 CFR Part 61, Subpart A]

The provisions of 40 CFR Part 61, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 14-1, apply to the facilities described in this section except when otherwise specified in 40 CFR Part 61, Subpart J and Subpart FF.

D.1.4 NESHAP for Benzene Waste Operations [326 IAC 14] [40 CFR 61, Subpart FF]

(a) Pursuant to 40 CFR 61.342(a), the Permittee is exempt from the requirements of 40 CFR 61.342(b) and (c), if the total annual benzene quantity from the facility waste does not exceed 11 tons per year. The total annual benzene from facility waste is defined as the sum of the annual benzene quantity for each waste stream at the facility that has a flow-weighted annual average water content greater than 10 percent or that is mixed with water, or other wastes, at any time and the mixture has an annual average water content greater than 10 percent. The benzene quantity in a waste stream shall be counted only once without multiple counting if other waste streams are mixed with or generated from the original waste stream. The total annual benzene quantity is determined based upon the quantity of benzene in the waste before any waste treatment occurs to remove the benzene.

(b) Pursuant to 40 CFR 61.342(g), compliance with 40 CFR 61, Subpart FF will be determined by review of the Permittee's records and results from tests and inspections using methods and procedures specified in 40 CFR 61.355.

D.1.5 Volatile Organic Compounds (VOCs) [326 IAC 12-1][40 CFR 60.116b, Subpart Kb]

Pursuant to 40 CFR 60.116b, Subpart Kb (New Source Performance Standards for Volatile Organic Liquid Storage Vessels), tank 01 has the following requirements:

(a) Pursuant to 40 CFR 60.116b(b), the Permittee shall keep readily accessible records of the following for the life time of the source:

(1) the dimension of the storage vessel; and

(2) an analysis showing the capacity of the storage vessel.

(b) Pursuant to 40 CFR 60.116b(f)(A), prior to the initial filling of the vessel storing a waste mixture of indeterminate or variable composition, the Permittee shall determine the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored using the methods described in 40 CFR 60.116b(e).

D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-9]

Pursuant to 326 IAC 8-9-6 (Volatile Organic Liquid Storage Vessels), the Permittee shall maintain a record and submit to the department a report containing the following information on tanks 02 through 04:

(a) The vessel identification number.

(b) The vessel dimensions.

(c) The vessel capacity.

(d) A description of the emission control equipment for each vessel described in 326 IAC 8-9-4 (a) and 4 (b), if applicable, or a schedule for installation of emission control equipment on vessels described in 326 IAC 8-9-4(a) and 4 (b), if applicable, with a certification that the emission control equipment meets the applicable standards.

The owner or operator of a stationary vessel shall keep all records as described for the life of the vessel.

D.1.7 Emission Offset Minor Modification Limits [326 IAC 2-3]

In order to make the requirements of 326 IAC 2-3 (Emission Offset) not applicable, the VOC emissions from the SDS shredder, the ATDU, and the distillation unit shall not exceed the emission limits listed in the table below:

Unit	VOC Emission Limit (lbs/hr)
SDS Shredder	0.028
ATDU - Carbon Adsorption System (SDS 03)	0.169
Distillation Unit	0.014

This is equivalent to 0.92 tons/yr VOC emissions from these units. Combined with the emissions from the tanks and the combustion units, the emissions from this modification are limited to less than 25 tons/yr. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) are not applicable.

D.1.8 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the ATDU shall be limited to less than 10.4 lbs/hr when the process weight rate is 4 tons/hr.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.9 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this facility and its control devices.

Compliance Determination Requirements

D.1.10 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11][40 CFR 63, Subpart DD]

Within 60 days after initial start-up but no later than 180 days after issuance of this permit, in order to demonstrate compliance with Conditions D.1.2 and D.1.7, the Permittee shall perform VOC testing for the SDS shredder, the ATDU, and the distillation unit utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C- Performance Testing.

D.1.11 Particulate Control

In order to comply with Condition D.1.8, the pug mill scrubber equipped with the ATDU for particulate control shall be in operation and control emissions from the ATDU at all times that the ATDU is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.12 Inspection and Monitoring Requirements [326 IAC 20-23] [40 CFR Part 63, Subpart DD]

The Permittee shall comply with the inspection and the monitoring requirements specified in 40 CFR 63.695.

D.1.13 Carbon Adsorption System Monitoring Requirements

The Permittee shall monitor the VOC breakthrough indicator of the carbon adsorption systems, at least once per shift when the SDS shredder, the ATDU, and the distillation unit are in operation. The Permittee shall replace the carbon canister as indicated.

D.1.14 Carbon Adsorption System Inspections

An inspection shall be performed each calendar quarter for the carbon adsorption systems controlling the SDS shredder, the ATDU, and the distillation unit. Inspections required by this condition shall not be performed in consecutive months.

D.1.15 Failure Detection

In the event that the carbon adsorption system malfunction has been observed:

If all the carbon canisters units equipped with one process fail, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

D.1.16 Visible Emissions Notations

(a) Visible emission notations of pug mill scrubber stack (SDS 04) exhaust shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.1.17 Parametric Monitoring

The Permittee shall monitor and record the pressure drop and flow rate of the pug mill scrubber at least once per shift when the associated ATDU is in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range of 2.0 and 8.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the flow rate of the scrubber is less than the normal minimum of 50 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. A pressure reading that is outside the above mention range or a flow rate that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

The instrument used for determining the pressure drop and flow rate shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months or at a frequency recommended by the manufacturer.

D.1.18 Scrubber Inspections

An inspection shall be performed each calendar quarter of the pug mill scrubber controlling the ATDU. Inspections required by this condition shall not be performed in consecutive months.

D.1.19 Scrubber Failure Detection

In the event that the pug mill scrubber malfunction has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.20 Record Keeping Requirements [40 CFR Part 63, Subpart DD]

Pursuant to 40 CFR 63.696:

(a) The Permittee shall comply with the record keeping requirements in 40 CFR 63.10 as specified in Table 2 of 40 CFR 63, Subpart DD that apply to the affected sources and the chosen compliance method.

(b) The Permittee shall maintain records in accordance with the requirements of 40 CFR 63.10 for the control devices.

(c) For the tanks using fixed roofs to comply with the control requirements of 40 CFR 63.685, the Permittee shall prepare and maintain the following records:

(1) A record for each inspection required by 40 CFR 63.695(b), as applicable to the tank, that includes the following information: a tank identification number (or other unique identification description as selected by the owner or operator) and the date of the inspection.

(2) The owner or operator shall record for each defect detected during inspections required by 40 CFR 63.695(b) of this subpart the following information: the location of the defect, a description of the defect, the date of the detection, and the corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provision of 40 CFR 63.695(b)(4), the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.

(d) For the tanks using an enclosure to comply with the control requirements of 40 CFR 63.685, the Permittee shall prepare and maintain records for the most recent set of calculations and measurements performed by the Permittee to verify that the tank enclosure meets the criteria of a permanent total enclosure as specified in “Procedure T - Criteria for and Verification of a Permanent or Temporary Total Enclosure” under 40 CFR 52.741, Appendix B.

(e) The Permittee shall record, on a semiannual basis, the information specified as follows for those planned routine maintenance operations that would require the control device not to meet the requirements of 40 CFR 63.693(d) through (h), as applicable.

(1) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

(2) A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during these 6 months that the control device did not meet the requirement of 40 CFR 63.693 (d) through (h), as applicable, due to planned routine maintenance.

(f) The Permittee shall record the information specified in 40 CFR 63.696(h)(1) through (h)(3) for those unexpected control device system malfunctions that would require the control device not to meet the requirements of 40 CFR 63.693(d) through (h), as applicable.

D.1.21 Record Keeping Requirements [40 CFR 61, Subpart FF]

(a) Pursuant to 40 CFR 61.356(a), the Permittee shall comply with the recordkeeping requirements in 40 CFR 61.356. Each record shall be maintained in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded unless otherwise specified.

(b) Pursuant to 40 CFR 61.356(b), the Permittee shall maintain records that identify each waste stream at the facility subject to 40 CFR 61, Subpart FF, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with this subpart.

(c) Pursuant to 40 CFR 61.356(b)(1), for each waste stream not controlled for benzene emissions, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

D.1.22 Record Keeping Requirements

(a) To document compliance with Condition D.1.5(a), the Permittee shall maintain records for the life of the source for tank 01 in accordance with (1) through (2) below:

(1) The dimension of the storage vessel; and

(2) An analysis showing the capacity of the storage vessel.

(b) To document compliance with Condition D.1.6, the Permittee shall maintain records for the life of the source for tanks 02 through 04 in accordance with (1) through (4) below:

(1) The vessel identification number.

(2) The vessel dimensions.

(3) The vessel capacity.

(4) A description of the emission control equipment for each vessel described in 326 IAC 8-9-4 (a) and 4 (b), applicable, or a schedule for installation of emission control equipment on vessels described in 326 IAC 8-9-4(a) and 4 (b), if applicable, with a certification that the emission control equipment meets the applicable standards.

(c) To document compliance with Condition D.1.13, the Permittee shall maintain once per shift records of VOC breakthrough monitor for carbon adsorption systems and the records of the spent carbon canister replacement when the carbon adsorption systems are in operation.

(d) To document compliance with Conditions D.1.14 and D.1.18, the Permittee shall maintain records of the results of the inspections required under Conditions D.1.14 and D.1.18.

(e) To document compliance with Condition D.1.16 pug mill, the Permittee shall maintain once per shift records of visible emission notations of the scrubber exhaust (stack SDS 04).

(f) To document compliance with Condition D.1.17, the Permittee shall maintain once per shift records of the following parameters across the scrubber associated the ATDU:

(A) pressure drop; and

(B) flow rate.

(g) To document compliance with Condition D.1.7, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(h) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.23 Reporting Requirements [40 CFR 63, Subpart DD]

(a) Pursuant to 40 CFR 63.697, the Permittee shall submit all of the notifications required by 40 CFR 63.9 as specified in Table 2 of 40 CFR 63, Subpart DD that apply to the affected source and chosen compliance method. These notifications include, but are not limited to, the following:

(1) An Initial Notification containing the information specified in 40 CFR 63.9(b)(2) no later than 120 days after initial start up.

(2) The Permittee shall submit reports in accordance with the applicable reporting requirements in 40 CFR 63.10 as specified in Table 2 of 40 CFR 63, Subpart DD.

(3) The Permittee of a control device used to meet the requirements of 40 CFR 63.693 shall submit the following notifications and reports:

(A) A notification of performance tests specified in 40 CFR 63.7 and 63.9(g).

(B) Performance test reports specified in 40 CFR 53.10(d)(2).

(C) Startup, shutdown, and malfunction reports specified in 40 CFR 63.10(d)(5).

(D) A summary report specified in 40 CFR 63.10(e)(3) on a semiannual basis.

(b) The notifications required by paragraph (a) shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

The notifications require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

D.1.24 Reporting Requirements [40 CFR 61, Subpart FF]

(a) Pursuant to 40 CFR 61.357(a), the Permittee shall submit, by the initial startup, a report that summarizes the regulatory status of each waste stream subject to 40 CFR 61.342 and

is determined by the procedures specified in 40 CFR 61.355(c) to contain benzene. The report shall include the following information:

(1) Total annual benzene quantity from facility waste determined in accordance with 40 CFR 61.355(a).

(2) A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements of 40 CFR 61, Subpart FF.

(b) Pursuant to 40 CFR 61.357(c), if the total annual benzene quantity from facility waste is less than 11 ton/yr but is equal to or greater than 1.1 ton/yr, then the Permittee shall submit to IDEM, OAQ a report that updates the information specified in 61.357(b). The report shall be submitted annually and whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 11 ton/yr or more. If the information submitted in the previous annual report is not changed in the following year, the Permittee may submit a statement to that effect.

(c) The notifications required by paragraph (a) and (b) shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

The notifications require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Pollution Control Industries, Inc.
Source Address: 4343 Kennedy Avenue, East Chicago, Indiana 46312
Mailing Address: 4343 Kennedy Avenue, East Chicago, Indiana 46312
Source Modification No.: 089-15970-00345

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

COMPLIANCE BRANCH
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Pollution Control Industries, Inc.
Source Address: 4343 Kennedy Avenue, East Chicago, Indiana 46312
Mailing Address: 4343 Kennedy Avenue, East Chicago, Indiana 46312
Source Modification No.: 089-15970-00345

This form consists of 2 pages **Page 1 of 2**

9 This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

Issued 2/04/04

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a
Permit Modification to a Part 70 Minor Source Modification Permit

Source Background and Description

Source Name:	Pollution Control Industries, Inc.
Source Location:	4343 Kennedy Avenue, East Chicago, Indiana 46312
County:	Lake
SIC Code:	4953
Minor Source Modification Permit No.:	089-15970-00345
Minor Source Modification Permit Issuance Date:	December 2, 2003
Permit Modification No.:	089-18513-00345
Permit Reviewer:	ERG/YC

The Office of Air Quality (OAQ) has reviewed a modification application from Pollution Control Industries, Inc., relating to the operation of the waste solvent treatment equipment permitted in Minor Source Modification (MSM) #089-15970-00345, issued December 2, 2003.

Explanation of Modification

Pollution Control Industries, Inc. (referred to as PCI) is a waste treatment plant and their Part 70 permit (T089-7738-00345) is currently being drafted. On December 2, 2003, MSM #089-15970-00345 was issued to PCI for the construction and operation of waste solvent treatment equipment. On December 17, 2003, PCI submitted a letter requesting the following changes to MSM #089-15970-00345:

1. The source proposed to install the following additional emission unit:

   (a) One (1) recovered water tank, identified as tank 05, constructed in 2004, with a maximum capacity of 12,000 gallons. The VOC content in the recovered water is less than 1% by volume.

   The potential to emit from this tank is less than the source modification thresholds in 326 IAC 2-7-10.5(d). Therefore, the construction of this unit is exempt from the source modification requirements in 326 IAC 2-7-10.5. This water tank is also considered an insignificant unit, pursuant to 326 IAC 2-7-1(21)(G)(ix) and there are no specifically applicable requirements for this tank. Since only the units with specifically applicable requirements are listed in MSM #089-15970-00345, this water tank is only documented in this Technical Support Document and will not be added in MSM #089-15970-00345.

2. The source stated that the potential to emit HAPs from the entire source is less than the HAP major source thresholds, and therefore, the entire source is not subject to the requirements of the National Emission Standards for Hazardous Pollutants for Off-Site Waste and Recovery Operations (326 IAC 20-23, 40 CFR 63.680-698, Subpart DD).

However, the source's Part 70 permit (T089-7738-00345) is currently being drafted and the potential to emit HAPs from the entire source is estimated to be greater than the HAP major source thresholds. The rule applicability of 40 CFR 63, Subpart DD for the units included in MSM #089-15970-00345 will be determined in the source's final Part 70 permit.

3. The source requested the flexibility to receive waste with benzene content greater than 10% by weight. Therefore, the pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, or control devices in MSM #089-15970-00345 are considered in benzene service and are subject to the requirements of the National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene (326 IAC 14, 40 CFR 61.110-112, Subpart J).

However, the units in MSM #089-15970-00345, issued on December 2, 2003, have potential to emit of a single HAP less than 10 tons/yr and potential to emit total HAPs less than 25 tons/yr before control and will not process more than 1,102 tons/yr of benzene. Pursuant to 40 CFR 61.110(c)(2), the affected units in MSM #089-15970-00345 are exempt from the requirements in 40 CFR 61, Subpart J.

The source also requested the flexibility to receive waste from chemical manufacturing plants, coke by-product recovery plants, or petroleum refineries. Therefore, the requirements of the National Emission Standard for Benzene Waste Operations (326 IAC 14, 40 CFR 61.340-359, Subpart FF) are applicable to this source.

The source does not plan to receive greater than 11 tons/yr of benzene quantity as defined in 40 CFR 61.342(a). Therefore, the hazardous waste treatment, storage, and disposal facilities included in MSM #089-15970-00345 are exempt from the requirements in 40 CFR 61.342(b) and (c), pursuant to 40 CFR 61.342(a). Pursuant to 40 CFR 61.342(g), compliance with this 40 CFR 61, Subpart FF is determined by review of the Permittee's records and results from tests and inspections using methods and procedures specified in 40 CFR 61.355. The requirements of 40 CFR 61, Subpart FF will be added to this MSM.

4. The source proposed to revise the VOC emission limits as below for the following units:

Unit	VOC Emission Limit (lbs/hr) in MSM #089-15970-00345	Proposed VOC Emission Limit (lbs/hr)
SDS Shredder	0.01 lbs/hr	0.028 lbs/hr
ATDU - Carbon Adsorption System (SDS 03)	0.05 lbs/hr	0.169 lbs/hr
Distillation Unit	0.01 lbs/hr	0.014 lbs/hr
Total	0.31 tons/yr	0.92 tons/yr

The VOC emission limits in MSM #089-15970-00345, issued on December 2, 2003, were established based on 99% control efficiency for the carbon adsorption systems. However, the required control efficiency for carbon adsorption systems in 40 CFR 63, Subpart DD is 95% and there are no other specific control efficiency requirements for the carbon adsorption systems. The source requested to revise the VOC emission limits based on regulatory required control efficiency of 95% and the corresponding VOC emission limits are listed in the table above. These changes will not affect the permitting status for the units included in MSM #089-15970-00345. Condition D.1.7 in this MSM will be revised to affect these changes.

5. The source stated that they will install dual carbon canister units in series to control each VOC emission point. If one of the carbon canisters fails, the VOC emissions are still controlled by another carbon canister. Therefore, it is not necessary to shut down the process when only one carbon canister fails. Condition D.1.15 for Carbon Canister Failure Detection in MSM # 089-15970-00345, issued on December 2, 2003, has been revised to clarify that the source will need to shut down the operation when both carbon canister units fail.

6. The source requested to refer to the scrubber with the ATDU unit as the “pub mill scrubber”, in order to distinguish other scrubbers at this source. Therefore, the unit description and the reference for this scrubber has been revised through the permit.

Justification for the Modification

This source is being modified through a Permit Modification to a Part 70 Minor Source Modification (MSM) permit because there are new applicable requirements (40 CFR 61, Subpart FF) in this permit and the record keeping requirements have also been revised.

Recommendation

The staff recommends to the Commissioner that the Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on December 17, 2003.

Proposed Changes

Language with a line through it has been deleted, bold language has been added.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

(b) One (1) Anaerobic Thermal Desorption Unit (ATDU), identified as ATDU, constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, equipped with one (1) 10 MMBtu/hr natural gas fired heater (venting through stack SDS 02), one (1) carbon adsorption system (for VOC control, venting through stack SDS 03), and one (1) **pug mill** scrubber (for particulate control, venting through stack SDS 04).

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

…

(b) One (1) Anaerobic Thermal Desorption Unit (ATDU), identified as ATDU, constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, equipped with one (1) 10 MMBtu/hr natural gas fired heater (venting through stack SDS 02), one (1) carbon adsorption system (for VOC control, venting through stack SDS 03), and one (1) **pug mill** scrubber (for particulate control, venting through stack SDS 04).

…

~~D.1.3 NESHAP for Equipment Leaks (Fugitive Emission Sources) of Benzene [326 IAC 14-7] [40 CFR 61, Subpart J]~~

~~This source does not handle fluids that are at least ten percent (10%) benzene by weight. Therefore, the requirements of 326 IAC 14-7 and 40 CFR 61, Subpart J are not applicable. Any change or modification which results in the source handling a fluid that is at least ten percent (10%) benzene by weight must receive prior approval from IDEM, OAQ.~~

D.1.3 General Provisions relating to NESHAP [326 IAC 14-1][40 CFR Part 61, Subpart A]

The provisions of 40 CFR Part 61, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 14-1, apply to the facilities described in this section except when otherwise specified in 40 CFR Part 61, Subpart J and Subpart FF.

~~D.1.4 NESHAP for Benzene Waste Operations [326 IAC 14-1] [40 CFR 61, Subpart FF]~~

~~This source does not accept benzene-containing wastes from chemical manufacturing plants, coke by-product recovery plants, or petroleum refineries. Therefore, the requirements of 326 IAC 14-1 and 40 CFR 61, Subpart FF are not applicable. Any change or modification which results in the source accepting a benzene-containing waste from a chemical manufacturing plant, coke by-product recovery plant, or petroleum refinery must receive prior approval from IDEM, OAQ. The Permittee shall maintain records sufficient to demonstrate that no benzene-containing wastes are accepted from these industries.~~

D.1.4 NESHAP for Benzene Waste Operations [326 IAC 14] [40 CFR 61, Subpart FF]

(a) Pursuant to 40 CFR 61.342(a), the Permittee is exempt from the requirements of 40 CFR 61.342(b) and (c), if the total annual benzene quantity from the facility waste does not exceed 11 tons per year. The total annual benzene from facility waste is defined as the sum of the annual benzene quantity for each waste stream at the facility that has a flow-weighted annual average water content greater than 10 percent or that is mixed with water, or other wastes, at any time and the mixture has an annual average water content greater than 10 percent. The benzene quantity in a waste stream shall be counted only once without multiple counting if other waste streams are mixed with or generated from the original waste stream. The total annual benzene quantity is determined based upon the quantity of benzene in the waste before any waste treatment occurs to remove the benzene.

(b) Pursuant to 40 CFR 61.342(g), compliance with 40 CFR 61, Subpart FF will be determined by review of the Permittee's records and results from tests and inspections using methods and procedures specified in 40 CFR 61.355.

D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-9]

(d) A description of the emission control equipment for each vessel described in 326 IAC 8-9-4 (a) and 4 (b), **if** applicable, or a schedule for installation of emission control equipment on vessels described in 326 IAC 8-9-4(a) and 4 (b), if applicable, with a certification that the emission control equipment meets the applicable standards.

D.1.7 Emission Offset Minor Modification Limits [326 IAC 2-3]

.....

Unit	VOC Emission Limit (lbs/hr)
SDS Shredder	~~0.01~~ **0.028**
ATDU - Carbon Adsorption System (SDS 03)	~~0.05~~ **0.169**
Distillation Unit	~~0.01~~ **0.014**

This is equivalent to ~~0.31~~ **0.92** tons/yr VOC emissions from these units. Combined with the emissions from the tanks and the combustion units, the emissions from this modification are limited to less than 25 tons/yr. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) are not applicable.

D.1.9 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this facility and its control device**s**.

D.1.11 Particulate Control

In order to comply with Condition D.1.8, the **pug mill** scrubber equipped with the ATDU for particulate control shall be in operation and control emissions from the ATDU at all times that the ATDU is in operation.

D.1.15 Failure Detection

In the event that the carbon adsorption system malfunction has been observed:

If all the carbon canisters units equipped with one process fail, i~~I~~Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

D.1.16 Visible Emissions Notations

(a) Visible emission notations of **pug mill** scrubber stack (SDS 03~~4~~) exhaust shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

D.1.17 Parametric Monitoring

The Permittee shall monitor and record the pressure drop and flow rate of the **pug mill** scrubber at least once per shift when the associated ATDU is in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range of 2.0 and 8.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the flow rate of the scrubber is less than the normal minimum of 50 gallons per minute, or a minimum established during the latest stack test,

the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. A pressure reading that is outside the above mention range or a flow rate that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

D.1.18 Scrubber Inspections

An inspection shall be performed each calendar quarter of the **pug mill** scrubber controlling the ATDU. Inspections required by this condition shall not be performed in consecutive months.

D.1.19 Scrubber Failure Detection

In the event that ~~a~~ **the pug mill** scrubber malfunction has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

D.1.20 Record Keeping Requirements [40 CFR Part 63, Subpart DD]

Pursuant to 40 CFR 63.696:

...

(e) The Permittee shall record, on a semiannual basis, the information specified as follows for those planned routine maintenance operations that would require the control device not to meet the requirements of 40 CFR 63.693(d) through (h), as applicable.

(1) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

(2) A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during these 6 months that the control device did not meet the requirement of 40 CFR 63.693 (d) through (h), as applicable, due to planned routine maintenance.

D.1.21 Record Keeping Requirements [40 CFR 61, Subpart FF]

(a) Pursuant to 40 CFR 61.356(a), the Permitee shall comply with the recordkeeping requirements in 40 CFR 61.356. Each record shall be maintained in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded unless otherwise specified.

(b) Pursuant to 40 CFR 61.356(b), the Permittee shall maintain records that identify each waste stream at the facility subject to 40 CFR 61, Subpart FF, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with this subpart.

(c) Pursuant to 40 CFR 61.356(b)(1), for each waste stream not controlled for benzene emissions, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

D.1.~~21~~**22** Record Keeping Requirements

~~(a) To document compliance with Condition D.1.3, the Permittee shall maintain records of the benzene content of the received wastes.~~

~~(b) To document compliance with Condition D.1.4, the Permittee shall maintain records of the sources of the received benzene-containing wastes.~~

(~~c~~**a**) To document compliance with Condition D.1.5(a), the Permittee shall maintain records for the life of the source for tank 01 in accordance with (1) through (2) below:

(1) The dimension of the storage vessel; and

(2) An analysis showing the capacity of the storage vessel.

(~~d~~**b**) To document compliance with Condition D.1.6, the Permittee shall maintain records for the life of the source for tanks 02 through 04 in accordance with (1) through (4) below:

(1) The vessel identification number.

(2) The vessel dimensions.

(3) The vessel capacity.

(4) A description of the emission control equipment for each vessel described in 326 IAC 8-9-4 (a) and 4 (b), applicable, or a schedule for installation of emission control equipment on vessels described in 326 IAC 8-9-4(a) and 4 (b), if applicable, with a certification that the emission control equipment meets the applicable standards.

(~~e~~**c**) To document compliance with Condition D.1.13, the Permittee shall maintain once per shift records of VOC breakthrough monitor for carbon adsorption systems and the records of the spent carbon canister replacement when the carbon adsorption systems are in operation.

(~~f~~**d**) To document compliance with Conditions D.1.14 and D.1.18, the Permittee shall maintain records of the results of the inspections required under Conditions D.1.14 and D.1.18.

(~~g~~**e**) To document compliance with Condition D.1.16, the Permittee shall maintain once per shift records of visible emission notations of the **pug mill** scrubber exhaust (stack SDS 0~~3~~**4**).

(~~h~~**f**) To document compliance with Condition D.1.17, the Permittee shall maintain once per shift records of the following parameters across the scrubber associated the ATDU:

(A) pressure drop; and

(B) flow rate.

(~~f~~**g**) To document compliance with Condition D.1.7, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(~~g~~**h**) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.~~22~~**23** Reporting Requirements [40 CFR 63, Subpart DD]

D.1.24 Reporting Requirements [40 CFR 61, Subpart FF]

(a) Pursuant to 40 CFR 61.357(a), the Permittee shall submit, by the initial startup, a report that summarizes the regulatory status of each waste stream subject to 40 CFR 61.342 and is determined by the procedures specified in 40 CFR 61.355(c) to contain benzene. The report shall include the following information:

(1) Total annual benzene quantity from facility waste determined in accordance with 40 CFR 61.355(a).

(2) A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements of 40 CFR 61, Subpart FF.

(b) Pursuant to 40 CFR 61.357(c), if the total annual benzene quantity from facility waste is less than 11 ton/yr but is equal to or greater than 1.1 ton/yr, then the Permittee shall submit to IDEM, OAQ a report that updates the information specified in 61.357(b). The report shall be submitted annually and whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 11 ton/yr or more. If the information submitted in the previous annual report is not changed in the following year, the Permittee may submit a statement to that effect.

(c) The notifications required by paragraph (a) and (b) shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

The notifications require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Conclusion

This permit modification shall be subject to the conditions of the attached Permit Modification No. 089-18513-00345.

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.